Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 5/17/2021

Water Use Efficiency
Annual Performance Report - 2020

WS Name: MAURY MUTUAL WATER CO

Water System ID# : 52100 WS County: KING

Report submitted by: *John Martinak*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not 100% metered – Did you submit a meter installation plan to DOH? No

Within your meter installation plan, what date did you commit to completing meter installation?

Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period *01/01/2020* To *12/31/2020*

Incomplete or missing data for the year? *No*

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons	*5,548,906* gallons	
Authorized Consumption (AC) – Annual Volume in gallons	*5,421,717* gallons	
Distribution System Leakage – Annual Volume TP – AC	*127,189* gallons	
Distribution System Leakage – DSL = [(TP – AC) / TP] x 100 %	*2.3 %*	
3-year annual average - %	*1.6 %*	*2017, 2019, 2020*

Goal-Setting Information:

Enter the date of most recent public forum to establish WUE goal: *04/07/2018*

Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process.

Customer WUE Goal (Demand Side):

Maury Mutual Water Company's goal is to reduce average day demand during the July/August billing period (peak demand) from 315 gallons per day per full-time, single-family residence to 309 gallons per day by 2017, and maintain lowered demand.

Customer (Demand Side) Goal Progress:

We continue to encourage water conservation, especially outdoor water use/irrigation, with an aggressive, increasing block rate structure.

Peak demand (July/August) is driven largely by the weather conditions. In 2020 full-time residences averaged 354 gallons per day during peak demand months. This exceeded our goal, and was largely due to dry conditions and a large costumer side leak during peak demand. The higher usage required an increase of ~232,000 gallons of source production during the July/August billing period.

Additional Information Regarding Supply and Demand Side WUE Efforts

MMWC strives to identify leaks early by comparing daily source production to normal seasonal demand. Unexpected & sustained surges in demand are investigated until a cause is identified. For our small system, often such surges are due to customer side leaks. Members are notified as soon as possible when a leak is suspected, and encouraged to remedy the situation in order to qualify for MMWC's Leak Dispensation Policy.

Describe Progress in Reaching Goals:

- Estimate how much water you saved.
- Report progress toward meeting goals within your established timeframe.
- Identify any WUE measures you are currently implementing.
- If you established a goal to maintain a historic level (such as maintaining daily consumption at 65 gallons per person per day for the next two years) you must explain why you are unable to reduce water use below that level.

The Leak Dispensation Policy, encourages customers to repair leaks sooner, as bill forgiveness is only good for one billing period per incident. It is difficult to estimate the amount of water saved, but customers have responded to the notifications of a suspected leak, and repairing leaks sooner than before.

Given the semi-rural nature of our community, irrigation remains the biggest factor of peak demand. Our aggressive increasing block rate structure encourages conservation, but dry summers and garden/livestock needs dictate water usage/demand.

The following questions will help DOH better understand water usage, water resources management and drought response. The data will be used to provide technical assistance, not for regulatory purposes.

All questions are voluntary

Month	Date of Measurement	Static Water Level (feet below measuring point)	Dynamic Water Level (feet below measuring point)
January			
February			
March			
April	04/21/2020	200.9	7.9
May			
June			
July			
August			
September			
October	10/28/2020	201.1	8.1
November			
December			

Water level data:

Please provide the following information (if known) to help us better utilize the water level data.

Well tag Id number:	AFJ062
Well depth:	308.5
Water level accuracy (within 0.01 ft < 1 ft ~ 1 ft)	within 0.01
Completion type (e.g., cased open interval, cased open-ended, cased open-ended with perforations, etc…)	8" casing, screened from 272' to 303.5' below surface
Location coordinates (latitude, longitude) and accuracy of the coordinates (< 1ft, ~1ft, >1000ft)	NE SW Section 15; Township 22N; Range 3E
Water level parameter name (e.g. depth below measuring point, depth below top of casing, depth below ground surface)	Depth below top of casing
Elevation of top of casing OR elevation of measuring point if different than top of casing (as specified in question 7)	237'

Monthly/Seasonal Water Usage:

What was your maximum daily water demand for the previous year (in gallons per day)? 30,000

Month	Volume of Water Produced in gallons
January	
February	
March	
April	2,767
May	
June	
July	40,370
August	218,169
September	
October	3,942
November	
December	

Water shortage response:

Did you activate any level of water shortage response plan the previous year?

☐ Yes ☐ No ☑ There was no need to

If you activated a water shortage response plan the previous year, what level did you activate? (Check all that apply)

☐ Advisory Conservation ☐ Voluntary Conservation

☐ Mandatory Conservation ☐ Rationing ☐ Other

What factors caused your water shortage the previous year?

☐ Drought ☐ Fire ☐ Landslides ☐ Earthquakes

☐ Flooding ☐ Water Supply Limitations ☐ Other

Do not mail, fax, or email this report to DOH